Form PTO-948 (Rev. 06/03)
Application No. 10/687310

U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office

# NOTICE OF DRAFTSPERSON'S PATENT DRAWING REVIEW

The drawing(s) filed (insert date) 10/31/2007 are:

A. ___ approved by the Draftsperson under 37 CFR 1.84 or 1.152.

B. ✓ objected to by the Draftsperson under 37 CFR 1.84 or 1.152 for the reasons indicated below. Corrected drawings are required.

**1. DRAWINGS.** 37 CFR 1.84(a): Acceptable categories of drawings: Black ink or Color (3 sets required).
___ Color drawings are not acceptable until petition is granted. Fig(s)___
___ Pencil and non black ink not permitted. Fig(s)___

**2. PHOTOGRAPHS.** 37 CFR 1.84(b)
___ One (1) full-tone set is required. Fig(s)___
___ Photographs may not be mounted. 37 CFR 1.84(e)
___ Photographs must meet paper size requirements of 37 CFR 1.84(f). Fig(s)___
___ Poor quality (half-tone). Fig(s)___

**3. TYPE OF PAPER.** 37 CFR 1.84(e)
___ Paper not flexible, strong, white, and durable. Fig(s)___
___ Erasures, alterations, overwritings, interlineations, folds, copy machine marks not accepted. Fig(s)___

**4. SIZE OF PAPER.** 37 CFR 1.84(f): Acceptable sizes:
21.0 cm by 29.7 cm (DIN size A4) or
21.6 cm by 27.9 cm (8 1/2x 11 inches)
___ All drawing sheets not the same size. Sheet(s)___
___ Drawings sheets not an acceptable size. Fig(s)___

**5. MARGINS.** 37 CFR 1.84(g): Acceptable margins:
Top 2.5 cm Left 2.5 cm Right 1.5 cm Bottom 1.0 cm
___ Margins not acceptable. Fig(s)___
___ Top (T) ___ Left (L)
___ Right (R) ___ Bottom (B)

**6. VIEWS.** 37 CFR 1.84(h)
REMINDER: Specification may require revision to correspond to drawing changes, e.g., if Fig. 1 is changed to Fig. 1A, Fig 1B and Fig. 1C, etc., the specification, at the Brief Description of the Drawings, must likewise be changed.
___ Views not labeled separately or properly. Fig(s)___

**7. SECTIONAL VIEWS.** 37 CFR 1.84(h)(3)
___ Sectional designation should be noted with Arabic or Roman numbers. Fig(s)___

**8. ARRANGEMENT OF VIEWS.** 37 CFR 1.84(i)
___ Words do not appear on a horizontal, left-to-right fashion when page is either upright or turned so that the top becomes the right side, except for graphs. Fig(s)___

**9. SCALE.** 37 CFR 1.84(k)
___ Scale not large enough to show mechanism without crowding when drawing is reduced in size to two-thirds in reproduction. Fig(s)___

**10. CHARACTER OF LINES, NUMBERS, & LETTERS.** 37 CFR 1.84(l)
✓ Lines, numbers & letters not uniformly thick and well defined, clean, durable, and black (poor line quality). Fig(s) 1A-7C, 9A-9C

**11. SHADING.** 37 CFR 1.84(m)
___ Solid black areas pale. Fig(s) ___
___ Solid black shading not permitted. Fig(s)___

**12. NUMBERS, LETTERS, & REFERENCE CHARACTERS.** 37 CFR 1.84(p)
___ Numbers and reference characters not plain and legible. Fig(s)___
✓ Figure legends are poor. Fig(s) 1A-10
___ Numbers and reference characters not oriented in the same direction as the view. 37 CFR 1.84(p)(1) Fig(s)___
___ English alphabet not used. 37 CFR 1.84(p)(2) Fig(s)___
✓ Numbers, letters and reference characters must be at least 32 cm (1/8 inch) in height. 37 CFR 1.84(p)(3). Fig(s) 1A

**13. LEAD LINES.** 37 CFR 1.84(q)
___ Lead lines missing. Fig(s)___

**14. NUMBERING OF SHEETS OF DRAWINGS.** 37 CFR 1.84(t)
___ Sheets not numbered consecutively, and in Arabic numbers beginning with number 1. Sheet(s)___

**15. NUMBERING OF VIEWS.** 37 CFR 1.84(u)
___ Views not numbered consecutively, and in Arabic numerals, beginning with number 1. Fig(s)___

**16. DESIGN DRAWINGS.** 37 CFR 1.152
___ Surface shading shown not appropriate. Fig(s)___
___ Solid black surface shading is not permitted except when used to represent the color black as well as color contrast. Fig(s)___

- data cut off partially (Fig 8)
- line missing between Arrowheads (Fig 8)

**COMMENTS:**
- shadings obj (Figs 1A-7C, 9A-9C)

Reviewer LVK

Date 11/28/07

If you have questions, call (703) 305-8404.

Attachment to Paper No. ___

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